

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1 to 6. (Canceled).

7. (New) A method for determining exhaust-gas recirculation quantity for a combustion engine having exhaust-gas recirculation, comprising:

(a) advance determining of a basic quantity of a gas mixture inducted into at least one combustion chamber of the combustion engine and at least one of (a) a basic pressure and (b) a basic temperature of the gas mixture for at least one predefinable basic state of the combustion engine at deactivated exhaust-gas recirculation;

(b) ascertaining at least one of (a) a pressure and (b) a temperature of the inducted gas mixture for a particular current engine state at activated exhaust-gas recirculation;

(c) determining a currently inducted gas-mixture quantity as the basic quantity, corrected at least by at least one of (a) a ratio of currently ascertained pressure to basic pressure of the gas mixture and (b) a ratio of the basic temperature to currently ascertained temperature of the gas mixture;

(d) determining a fresh-gas portion of the inducted gas mixture for the particular current engine state, and

(e) determining a current exhaust-gas recirculation quantity in accordance with a difference between the currently inducted gas-mixture quantity determining in the determining step (c) and the current fresh-gas portion determined in the determining step (d).

8. (New) The method according to claim 7, further comprising updating predetermined basic data with the combustion engine running when suitable, predefinable engine-operating states are present in accordance with ascertained current quantity, pressure and temperature values of the inducted gas mixture.

9. (New) The method according to claim 7, wherein the ascertaining step (b) includes determining a mixing temperature that results from admixing of recirculated exhaust gas to the fresh-gas portion of the inducted gas mixture.

10. (New) The method according to claim 9, wherein the determination of the mixing temperature is performed by one of (a) a temperature sensor having a sufficiently fast response characteristic and arranged placed downstream from an admixing location of recirculated exhaust gas to the fresh-gas portion and (b) a mixture-temperature model that includes a model-based determination of the exhaust-gas temperature in accordance with basic exhaust-gas temperature values, ascertained in advance for a basic state, and of temperature-correction contributions obtained from a current detection of influence parameters relevant for the exhaust-gas temperature.

11. (New) The method according to claim 10, further comprising correcting the exhaust-gas temperature value determined by an exhaust-gas temperature model by an exhaust-as recirculation cooling-rate contribution to determine the temperature of the recirculated exhaust gas.

12. (New) The method according to claim 9, further comprising updating a mixture-temperature model while the combustion engine is running during sufficiently steady-state engine operating states based on measured values from a temperature sensor arranged downstream from the admixing location of the recirculated exhaust gas to the fresh-gas portion.